

WHAT IS CLAIMED IS:

1. A crosslinked composition comprising:
 - 5 - from 20 to 100 parts by weight of at least one elastomer (I),
 - from 2 to 50 parts by weight of at least one triblock block copolymer (II), at least one block of which is composed predominantly of methacrylic monomers,
 - 10 - from 0 to 100 parts by weight of at least one thermoplastic polymer (III).
2. The composition as claimed in claim 1,
15 characterized in that the triblock block copolymer (II) corresponds to the following general formula Y-B-Y' in which: B is an elastomeric block thermodynamically incompatible with the Y and Y' blocks, and Y and Y' have or do not have the same chemical composition and at least one of them is composed
20 predominantly of methacrylic monomers.
3. The composition as claimed in claim 2,
 characterized in that B is an elastomeric block cocrosslinkable with the elastomer (I) chosen from
25 polydienes, partially or completely hydrogenated polydienes, polyolefin elastomers, long-chain polyacrylates, nitrile elastomers or acrylic copolymers with low Tg values comprising pendant vinyl functional groups.
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4. The composition as claimed in claim 3,
 characterized in that B is a polydiene obtained by the polymerization of at least one monomer chosen from the group consisting of butadiene, isoprene,
35 2,3-dimethyl-1,3-butadiene, 1,3-pentadiene and 2-phenyl-1,3-butadiene.
5. The composition as claimed in claim 2,
 characterized in that Y and Y' are obtained by the

polymerization of at least one monomer chosen from styrene and its derivatives, short-chain alkyl methacrylates, such as methyl methacrylate, or functional monomers, such as acrylic acid,
5 methacrylic acid or glycidyl methacrylate.

6. The composition as claimed in claim 5, characterized in that Y is a block composed predominantly of styrene and in that Y' is a block
10 comprising at least 50% by weight of methyl methacrylate.

7. The composition as claimed in claim 6, in which the Y' block comprises imide functional groups.
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8. The composition as claimed in claim 1, characterized in that the elastomer (I) is a compound chosen from the group consisting of natural rubbers, synthetic rubbers, EPRs, EPDMs,
20 elastomers with metallocene polymerization, such as poly(octene/ethylene), long-chain polyacrylates or polyolefin elastomers, which may or may not be modified, long-chain polyacrylates, such as poly(butyl acrylate) or poly(2-ethylhexyl
25 acrylate), fluoroelastomers (FPMs), such as copolymers based on tetrafluoroethylene, and silicone elastomers.

9. The composition as claimed in claim 8, characterized in that the elastomer (I) is poly(octene/ethylene).
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10. The composition as claimed in claim 9, characterized in that it can be converted like a
35 thermoplastic.

11. The composition as claimed in claim 1, characterized in that the thermoplastic polymer is chosen from grafted polyolefins, such as

polyethylenes, polypropylenes and poly(ethylene/propylene)s grafted with acrylic acid, maleic anhydride or glycidyl methacrylate.

5 12. The composition as claimed in any one of the preceding claims, characterized in that it comprises, before crosslinking, at least one crosslinking system which comprises one or more crosslinking agents and one or more crosslinking
10 promoters.

13. The composition as claimed in claim 12, characterized in that the crosslinking system comprises, as crosslinking agent, one or more
15 organic peroxides chosen from the group consisting of dicumyl peroxide, 1,3-bis(t-butylisopropyl)-benzene, 2,5-dimethyl-2,5-bis(t-butyl)hexane peroxide and 1,1-bis(t-butyl)-3,3,5-trimethyl-cyclohexane and, as crosslinking promoter(s), one
20 or more compounds chosen from the group consisting of zinc oxide, stearic acid, N,N'-(m-phenylene)dimaleimide, triallyl cyanurate, triisobutyl cyanurate, dimethacrylates, trimethacrylates, diacrylates and triacrylates.

25 14. The composition as claimed in claim 12, characterized in that the crosslinking system is based on sulfur and comprises, in addition to zinc oxide and/or stearic acid as crosslinking
30 promoters, one or more sulfur-donating activators and optionally an antireversion agent.

15. The composition as claimed in claim 12, characterized in that the crosslinking system
35 comprises, as crosslinking agent, a phenolic resin chosen from reactive alkylated methylphenol/formaldehyde and bromomethylphenol/formaldehyde resins and, as crosslinking promoter, a

chloropolymer, optionally in combination with zinc oxide and/or stearic acid.

- 5 16. The composition as claimed in one of claims 13 to 15, characterized in that the crosslinking agent and the crosslinking promoter are present at a content of between 0.5 and 12 parts by weight per 100 parts of the blend.
- 10 17. The crosslinked composition as claimed in any one of the preceding claims, additionally comprising a plasticizer and/or fillers of the light-colored fillers type or carbon blacks type and/or adjuvants.
- 15 18. A process for the preparation of the crosslinked composition with thermoplastic conversion as claimed in one of the preceding claims, characterized in that it comprises the blending of
20 at least one elastomer and of at least one triblock block copolymer, optionally in the presence of a thermoplastic polymer, of a plasticizer, of fillers and of adjuvants, and the crosslinking of this blend by an appropriate
25 crosslinking system at a suitably chosen temperature.
19. The process as claimed in claim 18, characterized in that it comprises the crosslinking at a
30 temperature of between 150 and 320°C.
20. The process as claimed in claim 18 or 19, characterized in that the crosslinking is carried out for a time of between 1 and 15 minutes.
- 35 21. An insulation and/or leaktightness seal and molding comprising the crosslinked composition as claimed in any one of claims 1 to 17.

22. The use of the insulation and/or leaktightness seal and molding as claimed in claim 21 in the construction industry.
- 5 23. The use of the insulation and/or leaktightness seal and molding as claimed in claim 21 in the automobile industry.
- 10 24. A conduit, such as pipes, hoses, manifolds or nozzles, comprising the crosslinked composition as claimed in any one of claims 1 to 17.
- 15 25. The use of the composition as claimed in one of claims 1 to 17 in the manufacture of electric cables.
26. The use of the composition as claimed in one of claims 1 to 17 for the manufacture of tires.
- 20 27. The use of the composition as claimed in one of claims 1 to 17 for the manufacture of belts.
28. The use of the composition as claimed in one of claims 1 to 17 in the manufacture of shoe soles.